

# Old People Can't Eat Buttered Biscuits

## Ecology Notes : The Basics

organism, population, community, ecosystem, Biome, Biosphere

- 2.1.6 Define the terms species, population, habitat, niche, community, and ecosystem with reference to local examples.   
 & on #2nd page of notes

- Species - (abbreviated spp.) → a particular type of organism; can interbreed w/ each other & produce fertile offspring. ex. duckweed
- Population - group of same spp. in an area. Able to interbreed. ex. all the duckweed in Duck Lake.
- Community - group of populations living & interacting together in an area. ex. all the orgs. in Duck Lake
- Ecosystem - the community & abiotic factors in an area. ex. Duck Lake
- Biome - Collection of ecosystems that share climate ex. Temperate forest
- Biosphere - part of Earth inhabited by organisms

- 2.1.1 Distinguish between biotic and abiotic (physical) components of an ecosystem

### Living Components

- ↳ organism, their interaction (predation, parasitism, mutualism, commensalism, Competition & disease)
- ↳ their waste

### Non-living physical & chemical Components

- ↳ atmosphere, climate, light intensity, temp range, soil structure, water chemistry, level of pollutants, seasonality.

- 2.2.1 List the significant abiotic (physical) factors of an ecosystem.

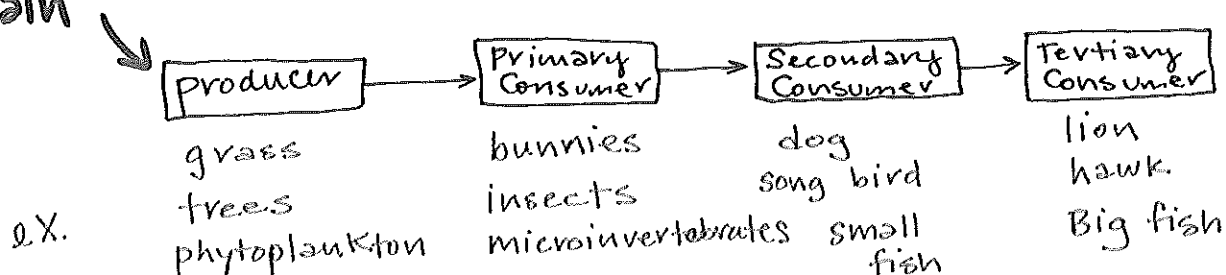
Duck Lake

- ↳ light intensity, water temp., water depth, soil moisture, soil chemistry, pollution, water pH, air temperature

- 2.1.3 Identify and explain trophic levels in food chains and food webs selected from the local environment

↳ Many Food chains Connected.

## Food chain



◦ 2.5.1 Explain the role of producers, consumers, and decomposers in the ecosystem

◦ Producers (AKA autotrophs) manufacture your own food from Sun (plants, phytoplankton)

◦ Consumers (AKA heterotrophs) feed on producers or other consumers to get Energy. → can be herbivores, carnivores, omnivores, detritivores or decomposers

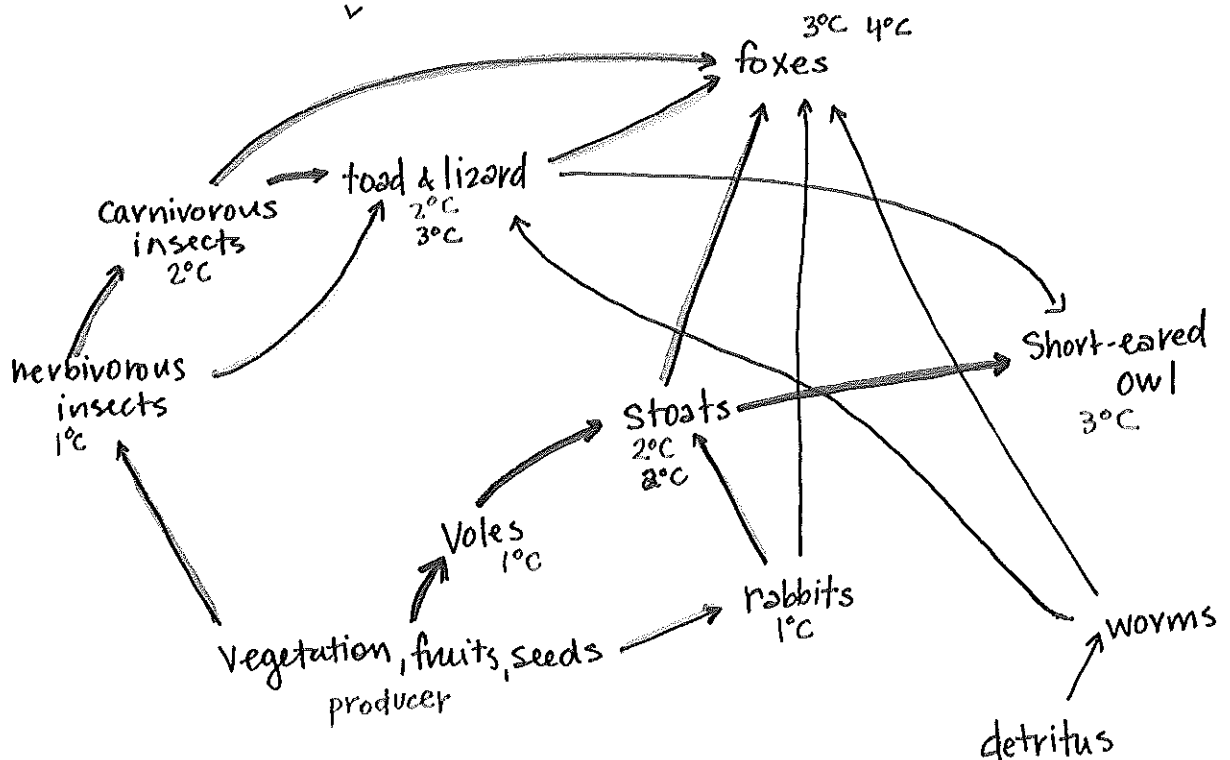
Shred materials into smaller bits

◦ Decomposers - get energy from dead organisms. Bacteria & Fungi

◦ 2.1.4 Define the term trophic level - position an organism or a group of organisms in a community occupies in a food chain.

\* Start w/ a producer & at the top put a top carnivore.

\* Organisms can be in more than one trophic level.



\* Habitat - the enviro. where an org. lives. Includes <sup>the</sup> physical enviro.  
ex. Duckweed lives in Duck Lake.

\* Niche - How an org. makes a living, where it lives, how it deals w/ resources, & its relationships to other, abiotic factors